

CLAIMS:

1. A device comprising at least a first and a second module, said first module (M1) being intended to supply instructions (I) to said second module (M2), and said second module being intended to receive data (D-IN) and to perform at least one function (F_i) that necessitates the execution of a succession of operations (O_{i,j}) so as to produce a result (R_n)

5 based on a plurality of received data,
characterized in that:

- said first module is arranged for supplying said instructions to the second module in predefined time windows (t_{6n}, t_{6n+1}, t_{6n+2} and t_{6n+5}), said instructions containing at least one operation indication (j),
- 10 - said second module comprises an operation counter (CO_i) intended to indicate the next operation to be executed, and a data counter (CD_i) intended to count the received unused data,
- and said second module is arranged for executing a received instruction only if the operation indication contained in the received instruction coincides with the next
- 15 operation to be executed such as indicated by its operation counter, and if its data counter indicates that the data necessary for the execution of this operation are available.

2. A device as claimed in claim 1, characterized in that the second module is intended to receive data in predefined time windows (t_{3n+2}), said data (D_q) being associated to an indicator of data validity (V_q) which is in a <<valid>> state when the data can be used by the second module, and in an <<invalid>> state when the data cannot be used by the second module.

3. A device as claimed in claim 1, characterized in that said second module is arranged for producing, in predefined time windows (t_{6n+5}), results (R_n) associated to a result validity indicator (V'_n), the result validity indicator being in an <<invalid>> state when no result at all is available.

4. A device as claimed in claim 1, characterized in that said second module, which is intended to perform a plurality of functions (F_i), comprises a data counter (CD_i) and an operation counter (CO_i) for each of said functions, and in that the instructions (I) produced by said first module contain a function indicator (i) which permits the second module to
5 determine the data counter and the operation counter to be used for deciding the execution or not of an instruction.

5. A device as claimed in claim 1, characterized in that it comprises a plurality of second modules (CCP0, CCP1, CCP2, CCP3) connected so that results produced by at least
10 one second module form the data received by another second module.

6. A programmable demodulator comprising a device as claimed in claim 1.

7. A receiver comprising a programmable demodulator as claimed in claim 6.

8. A transmission system comprising at least a transmitter and a receiver as claimed in claim 7.